TPWKY Ep 208 Dietary Guidelines Part 1

[00:00:00]

EW: "How can the housekeeper tell whether or not she is providing the food which her family needs and is getting the best possible returns for the money she spends? Unfortunately, the price she pays for food is no test of the nourishment it yields to the body. Tomatoes at 5 or 10 cents apiece in winter do not build body tissues nor furnish fuel for the body engine any better than those at 5 cents a quart in the summer. Appetite is not always a safe guide. A child's appetite might be satisfied with a diet of nothing but sugar, but this certainly would not be good for him. Neither can hunger and its satisfaction always be relied on. A bulky diet of potatoes or bananas alone would soon make a person feel that he had eaten enough but would not furnish all that the body needs.

Evidently, what a person who plans meals ought to know is what things the body needs in its food and how these needs can be fulfilled by the ordinary food materials. This paper is intended to give such information in a simple way. It should make plain that different kinds or classes of foods serve different uses in the body and should help the housekeeper to choose those which will serve all these uses without waste.

It is very hard for a housekeeper to know exactly how much of each of the food substances or nutrients her body needs, or exactly how much of each she is giving them. In order to calculate exactly how much starch, sugar, fat, protein, etc., the family needs one would have to know exactly how much muscular work each member was performing, and also exactly how much of the different nutrients each food contained, and exactly how much each person would eat. This, of course, would mean a great deal of figuring. Fortunately, such exactness is not necessary in ordinary life. If a little too much or too little of one nutrient is provided at a single meal or on a single day, a healthy body does not suffer because it has ways of storing such a surplus and of using its stored material in an emergency. The danger would come if the diet taken week in and week out always provided too much or too little of some one nutrient. Against this danger the housekeeper can more easily protect her family.

Good food habits, it must be remembered, include more than cleanliness and order in everything that has to do with food and meals and leisurely ways of eating. Equally important are a liking for all kinds of wholesome foods, even if they have not always been used in one's home or neighborhood, and eating

reasonable amounts. Every effort should be made to train children in such good food habits. If older people have not learned them, they too should try to do so for such things are very important, not only to health, but also to economy."

EAU: I love it. Erin, can we just have that replace all of our guidelines the housekeeper bit and

EW: housekeeper? Her? Yeah. Yeah. I mean, I think, like, what I love about these guidelines is that there, and there's so much more to them, right? Like this comes from a 14 page or so pamphlet about how to feed your family. It has sample meals that I, I kind of called out. So it like, what is one, here's, here's an example, uh, for a man. So they have it broken down by like, here's one for a family with two adults and three children. Here's one for a man who does a lot of muscular work outside, he would need each day, one and a quarter pounds of bread, a quarter cup of butter, oil, meat drippings or other fat quarter cup of sugar, or a third of a cup of honey. And then like a little bit of fruits and veggies and 12 ounces of, you know, meat.

EAU: Meat 12 ounces.

EW: or also fish or cheese or eggs or legumes. So there are other, there are non-animal protein sources acknowledged and recommended.

EAU: Fascinating.

EW: Isn't that wild? So that is from really the United States first nutritional guidelines from 1917. It was from a pamphlet written by Caroline Hunt and Helen Atwater, and yeah,

EAU: I love it.

EW: there you go.

Hi, I'm Erin Welsh,

EAU: I am Erin Allmann Updyke,

EW: and this is, this podcast Will Kill You.

EAU: welcome to, what are we calling this? The food pyramid?

EW: Okay. That's what I initially called it, and then I was like, nutritional guidelines might be more

EAU: Yeah. Dietary guidelines,

EW: guidelines.

EAU: Part one. There

EW: you go. Part one. Yeah. So we're breaking this up into two episodes because there's so much to cover. It's really exciting too. Like I feel like I'm really glad that we chose to do this in two episodes because it's given, it's given us an opportunity to dig deep into some of these questions of like how these guidelines are put together and the history of them. Like what actually goes into making these guidelines, um, and some of the ethical considerations that we should consider, I guess. that's all, that's all this episode, and then next week you're gonna be taking us through the most recent guidelines and what the science actually [00:05:00] does have to say when it comes to diet and health and foods that we should eat, and foods that we should avoid, and blah, blah, blah, all that

EAU: stuff. No small task.

EW: yeah, I have a wide variety of sources for

EAU: I can't, I cannot

EW: learn,

EAU: especially just about the history of the dietary guidelines in the US 'cause it's a, I know there's a lot there.

EW: I, I am really hoping that I get the answer from you next week. As to what the heck is going on with protein

EAU: and why.

EW: Yesterday I went to the store and I was like, there's protein, popcorn, protein, popcorn protein,

EAU: coffee, protein,

EW: sparkling water. I about fell over when I saw

EAU: I will, I don't know if I'll answer that question, but we will talk quite a lot about protein 'cause you can't not, you

EW: I am I, yeah.

EAU: I don't have an answer as to why there's protein popcorn.

EW: Yeah. I was like, what?

EAU: Before we can do any of this, it's quarantini time.

Yeah.

EW: We are drinking this week. Your daily apple.

EAU: daily apple.

EW: An apple a day keeps the doctor away. This is in no way an endorsement of Apple specifically, or

EAU: We're not being paid by the Apple lobby over here.

no,

EW: we're not. But you know, there is one.

EAU: I'm sure.

EW: So in your daily apple, how you make it is you mix together some apple juice, various juices, essentially, you know, try to find ones that are juice and not just pure sugar, but, uh, apple juice, lemon juice, pomegranate juice, and a dash of sparkling water. Uh, it's, it's great.

EAU: Yeah. Very refreshing.

EW: Sure.

EAU: We'll post the full recipe for your daily apple on our social medias for sure.

EW: Probably on our website. I think we're getting rid the video

EAU: situation. So you can find 'em there. This podcast will kill you.com, where you can also find so much other amazing information there. You know, we've got transcripts from all of our episodes. We've got sources that we use for every single episode. We've got merch, we've got a Good Reads list, we've got a bookshop.org affiliate account. We've got links to Blood Mobile who does our music. We've got Patreon, we've got, I mean, wow, the list goes on.

EW: Absolutely goes on and on. Thanks for that, Erin.

EAU: No problem.

EW: I, I think we have no other business that I can remember and so let's take a

EAU: tell me everything okay.

EW: How do we decide what to eat? Our days are filled with endless micro decisions about what to make for breakfast, lunch, dinner, snack time. These decisions are shaped by so many factors, right? From what we have on hand to how long something takes to make from what we grew up eating, to what we can afford, from whether we have dietary restrictions to, you know, just what we're in the mood for, how exactly we make these decisions has greatly shifted over history as agriculture, global trade, industrialization, and advertising have altered the ways that we interact with food. In most high income countries, what we've seen over the past century is an explosion in food variety and an overall expansion in access. That means that the question has morphed from what can we eat to what should we eat? But who is behind that should and where did they get their information?

EAU: You gonna tell me, Erin?

EW: On January 7th, 2026, the US Department of Health and Human Services, along with the USDA, unveiled the new dietary guidelines for Americans. And while some of the recommendations have not changed in decades, like an emphasis on fresh vegetables and whole grains, others represent a pretty stark departure from previous guidance, like the inclusion of butter and beef tallow as good or you know.

EAU: healthy fats

EW: healthy sources of fats, changes to the guidelines are not unprecedented. They're actually expected since 1980 when the US dietary guidelines for Americans or DGA was passed. Every five years, those guidelines are revisited by an appointed committee who publishes a new report. The logic behind this decision is very sound like why we keep revisiting these guidelines. Our knowledge is always evolving, and so we should evaluate policies in light of new scientific research and be open to change. That's how science works. At least that's how it should work. Where things get tricky is when other interests, such as financial are present that weaken or refute the science. National dietary guidelines are presented as a scientific consensus, but are they? Or are some guidelines influenced more by industry than by science? And maybe you're listening to this and thinking like, well, those guidelines don't mean anything to me. I never use them. I don't even know what's in the newest [00:10:00] ones. And fair enough. Like that's, I, I, I get that. But these guidelines do have a huge impact, not just on overall perception of what a healthy diet is, but also in a very tangible way. They will affect what the 30 million US children in the National School Lunch Program eat on an average school day. They will affect other people who are on food assistance programs and what foods they can get assistance for. Tracing the history of these guidelines can reveal so much about our understanding of nutritional science, about globalization and the food supply, and about the insidious influence of industry on our perception of quote unquote "healthy". Today i'm gonna take us through the story of a question. How should we eat? Not by answering that question, but by examining who has answered it and what underlies their advice.

EAU: Oh my gosh. I'm thrilled.

EW: Dietary advice is far from a 20th century invention. Long before the words vitamin or carbohydrate had entered our vocabulary, there were strong, culturally distinct recommendations on what to eat and what not to eat. Certain animals and plants carried powerful symbolism and were reserved for ceremonial purposes, consumed for their purported medicinal qualities, or just forbidden entirely. But beyond these food taboos or medicinal ingredients, there were also general recommendations for a quote unquote "healthy diet". So like for instance, the ancient Greeks and Romans advised moderation in food and beverage, for example. And in keeping with the humoral theory of disease, a balanced diet was recommended. For someone who is ill, that balance might be tilted to restoring the humors. Overall though, I'm not sure what a balanced diet meant

EAU: it meant. Yeah.

EW: And whether that was consistent. And how achievable it would've been for like your average citizen of the ancient world. have no idea. they even know about balanced diets? I, I don't. I don't know.

EAU: Like what were their food groups that they were balancing

EW: You know, I don't. That is a

EAU: Wine. Wine was a big one. Wine.

EW: Wine was absolutely a food group, you know? Then you had, I don't know, like there must have been bile, like, you know I mean? Like yellow bile, this is gonna increase your yellow bile and whatnot.

EAU: right, right, right.

EW: But I think that what's.

EAU: hot foods. Wasn't that a whole thing?

EW: Yeah. A thing. That is still a thing. Yeah. Uh, but where the link between diet and health was clearer in ancient times was actually in raising livestock. So farmers noticed that if they fed their livestock, different diets like grass versus straw, for example, there might be a pretty major difference in how many young they had, how early they matured, the, how big they grew, the milk they produced, stuff like that.

EAU: Okay.

EW: How much of this was carried over to dietary guidelines for humans? I don't know. Not sure. But it seems that overall thousands of years would pass before there was anything resembling like a general consensus on what constituted a healthy diet. Partly because global trade and food preservation practices like refrigeration and canning that limited how much food or the, or the variety of food that someone had access to. Like how many people could reliably eat a few cups of leafy greens a week, year round?

EAU: Right. No.

EW: no one.

EAU: Not a thing

EW: Not really a or

EAU: a cup of fruit world,

EW: in the ancient world. Yeah,

EAU: right?

EW: Right. And so, but the answer, I mean, sure there were some people that achieved more of like a diet in, in line with what we eat today, but it would depend a lot on, on, on the person themselves, right? Like where they lived, their socioeconomic status, all of these different factors. Um, but even if someone had a variety of foods available to them, how would they know to choose fruits and vegetables over other options? Um, especially when like fats and sugars taste good for reason. Like it's good. It's like evolutionarily, we are ingrained to think that that is the most delicious thing on earth. And Yeah. But the 18 hundreds is really when nutritional science got its start. And it was initially mostly focused on identifying and treating nutritional deficiencies rather than the much trickier puzzle of determining, you know, which elements constitute not just a sufficient, but a healthy diet. The goal of nutritional science in the, in these early years was preventing disease, not maximizing health.

EAU: that's, that's a really interesting, that distinction.

EW: Yes. And

EAU: it's also preventing, like you said, deficiency diseases

EW: mm-hmm.

EAU: different than what the goals of nutrition guidelines are today.

EW: Preventing chronic diseases. Yeah. Yeah, and it's, and so this, this, this question of how do we use food to prevent disease? That's, it was interesting in its own, just like scientific, right? But more than that, it was a logistical question. [00:15:00] How do you feed an army? How much food, or what kinds of food does, does a soldier or a sailor need to stay in fighting shape? So that is really what drove a lot of these questions in nutritional science. So for instance, scurvy, which we know today is caused by vitamin C deficiency, had plagued humans for millennia. Uh, but it grew to new levels of concern in the 17th and

18th centuries, prompting military doctors like James Lind to investigate what foods might stave off this horrific illness. our scurvy episode for more on that. Uh, but these observational studies then led to people realizing that citrus was a good scurvy prevention or preventative. And so in 1835, British Parliament passed the Merchant Seamans Act, which required lemon juice to be included in all rations. This is really, some people consider this to be the first governmental dietary guidelines.

EAU: that's so interesting.

EW: Yeah. Because

EAU: it's gotta have lemon juice. That's the first that's, that's

EW: It is required on all of these ships. And it's like, even though it's a subset of the population, even though the rationale was not figured out for another century because Guinea pigs, again, see our scurvy

EAU: episode.

EW: But it's, I find that, I do find that really interesting is that's like this, you, we know that you need to have this and we don't know why, but this is important.

EAU: Yeah. That's so interesting.

EW: . So while Lind and other pioneers in this field mostly relied initially on observational studies, you know, what food seems to help prevent this disease. But then the chemical revolution of the late 18th century, that is what really paved the way for the quantification of what we ate. What is in the food that we're eating? These chemists were figuring out essentially what life is made of and how we turn matter into energy. And it led some to ask what we needed to sustain life, not just what life is made of, but what does it need to keep going. The industrial Revolution provided the perfect metaphor for these explanations of nutrition, the body as a machine, but with one important difference that, that they realized. Unlike machines which ran on, you know, one type of fuel, experiments revealed that the body needed a mixture, otherwise disease or death might result, you needed the right kinds of fuel

EAU: The combination.

EW: combination. And so this, this kind of reasoning though seeing diet as a way to avoid deficiencies. This persisted throughout the rest of the 18 hundreds and it guided scientific research into what was considered a quote unquote complete diet.

EAU: Hmm.

EW: Not in the way that we think of a complete diet today, as in like, you know, the different balanced components that we should aim for, for healthy eating and not having too much of this or too much of that, but a complete diet as in the bare minimum to avoid deficiencies, not only in terms of specific nutrients, but just like enough food, period.

EAU: Okay.

EW: This research served multiple purposes, right? On the one hand, it was helpful for, for figuring out how to feed people, especially people who are like, for instance, unemployed British cotton factory workers was like a big part of this early on. Like how do we give them enough food so that we're not killing them, but not spending too much money? You know, like how do we do this as cheaply as possible?

EAU: the minimum that we need to just people alive

EW: How can we preserve life? Yeah. And on the other hand though, it served as helpful advice for the general public, much of which was navigating a totally new food landscape compared to past generations. The industrial revolution and growth of cities overall meant that food had to travel farther to get to the mouths of consumers, leading to all sorts of issues with food safety and consumer protection, alongside greater technology into how to make food more shelf stable. And so this innovation in food preservation and packaging, it meant that consumers had more options to choose from, like more ways to spend their money. The cheapest options were rarely nutritious, which meant, of course, that you could spend your entire meager paycheck to feed your family, and they would still not get what they needed to avoid deficiencies, let alone achieve, you know, optimal health.

EAU: Right.

EW: So by the late 18 hundreds, many countries who were seeing a looming nutritional disaster stepped in to regulate food safety, which gradually encompassed coming up with dietary guidelines for their citizens. So in the US

this process was spearheaded by W.O. Atwater. It was appointed by the USDA in the 1890s to be the first director of research activities. And his goal essentially was to break down foods into their main components. Protein or nitrogen, he also called it, carbohydrate fats, et cetera. And then to make recommendations, uh, especially geared towards poor families on how to have a healthy diet on a limited income. So he suggested a balance [00:20:00] of 15% protein, uh, 33% fat and 52% carbs. And that men doing moderate work should consume about 3,500 calories, which is about a thousand more than today's recommendations. But overall proportions are, I think, pretty similar.

EAU: I, it's so interesting that back then they, especially in the context of how things went this year in the us, that they were specifically targeting their guidance for poorer families, like recognizing this socioeconomic disparity that early on in that, uh, yeah, that's very interesting. In the context of today.

EW: I mean, It's like the more things change, the more they stay the same for sure. Because so many things you're like, we've been saying the same thing for so long. And then also it's like, oh my God, protein again. What are we doing here? So like at Hat water was, was a little bit kind of like mega focused on protein as as this really important thing. And it was among the most expensive of food items. And so under his guidance you would have these families that were spending about 50% of their entire household income on protein. And that of course then made fruits and green vegetables, a disposable luxury. It was like protein first. Everything else later.

EAU: later.

EW: Yeah. Interesting. It's like a, not that dissimilar to today in terms of this like overwhelming focus on protein. Um, and his, so his recommendations, I just wanted to dig in. I I was definitely like reading this in the context of, you know, protein, popcorn, whatnot. But he was, his recommendations were, that an average working man outside should get about 125 grams of protein a day as like the absolute minimum. Um, but another researcher, and also I will say that like the protein could have come from any source, not an, not just animal protein, but another researcher was like, I don't, I, I, I'm worried that you're overestimating how much you need. And so he ran this experiment where he fed, you know, these army men on 60 grams of protein a day and like studied their body composition throughout a se, you know, period of months. Totally fine.

EAU: Yeah. The

EW: same

EAU: Uh,

EW: yeah. Yeah. Um, anyway, but, but there was this interesting, so like not only was Atwater focused on protein, and it's possible that like historically back then people weren't getting enough protein, but like was 1 25 too much? Yeah. Probably for most people, absolutely 1 25 grams. Um, but he also recognized that people in general primarily ate foods that were high in fat, starch, and sugar. Like that was what most of their diets were comprised of. And he didn't live to see the heyday of vitamin discovery, which was like within the first few decades of the 20th century. Nor did he live to see the USDA's first general dietary guidelines, which were heavily influenced by his work and written by his daughter, uh, Helen Atwater

EAU: and

EW: Caroline Hunt, which from our account. Isn't that cute? Yeah.

EAU: I didn't do what my dad did.

EW: Yeah. Um, but these guidelines, this 14 page pamphlet in 1917 titled How to Select Foods. These guidelines marked the first phase for dietary advice in the US: diet as cure slash eat more food is like how I think it's characterized. Uh, so they include some familiar things like food groups: fruits and veggies, meats, and other protein rich foods, cereals and other starch, sweets, fatty foods, stuff like that. And information about micronutrients, so like vitamins and minerals. But other aspects feel distinctly absent or different from today, like any upper limits on consumption.

EAU: Hmm. That's interesting.

EW: Mm-hmm. And so this combined with the emphasis on micronutrients was seized by food producers who saw an opportunity to market themselves, right? With, with consumers having so many more options at the store, food companies needed to stand out and they used these guidelines to do so. Vitamins and minerals became a selling point.

EAU: Hmm.

EW: Like our bread has vitamins in it and like every bread or like our, you know, our bread is not deficient in vitamins. Unlike dot.

EAU: Yeah.

EW: Yeah. The early 20th century saw two world wars where feeding an army transformed from an art into a science. Rations had to be large enough to feed the average soldier to prevent any nutritional deficiencies and not spoil at home. However, guidance remained vague and at times contradictory. So there was five food groups initially that grew to 12, then shrank to seven, and then to eight, and then grew to eight. It was all over the place. There were different pamphlets that contained different advice influenced by things like the Great Depression and the rationing of meat, sugar, butter, and canned goods during the wars. So, for instance, in 1942, just to give you a little bit of, uh, an insight into the confusing ness of this, uh, [00:25:00] in 1942, federal programs advised US citizens to eat foods from eight different groups a day. Half of these groups were milk, meat, eggs and butter.

EAU: Those are all different groups.

EW: Those are all different groups.

EAU: What?

EW: Yeah,

EAU: Milk? Eggs. Butter, meat. Those are all separate things.

EW: indeed.

EAU: Oh goodness. Butter gets its whole own group. I mean, we're back there today,

EW: We're I was gonna say like the more things change, right. Uh, and then the next year, another change. Right. The USDA's, national Wartime Nutrition Guide said, quote, US needs us strong. Eat the basic seven every day. Again, milk, eggs, and butter. Each took up their own category.

EAU: Out of seven.

EW: Yeah. Yeah, the basic seven was the first guidance to include actual serving suggestions, which provided a minimum, but no maximum. So for instance, three or three to four or more glasses of milk daily for children plus ice cream. Not kidding.

EAU: Three to four glasses of milk For children, be iron

EW: less for adults. Yeah. Uh, two or more tablespoons of butter daily. Uh, there's more. Yeah, it's, but it, it always was or more, right? there was no, it was always, or every single

EAU: this is minimum that you need regardless of calories needed, regardless of just at least this. Yeah, yeah,

EW: And I think it still reveals a lot about this preoccupation with like, deficiencies and, and reasonably so. Um, and food producers, I mean, they were thrilled by this guidance. Except for the meat, poultry, fish industry. That's right. This is the only one that didn't have, or more, it was just like one daily serving recommended.

EAU: Oh, that's so interesting. We really that that's the war on protein right there.

EW: There we go. It was started in World War ii. Yep. But yeah, this, this concern or this preoccupation with, uh, deficiencies, nutritional deficiencies was, was valid. Right? It was based on surveys that revealed many Americans were not getting enough food at all. Millions simply could not afford to, especially during the Great Depression and wartime and others were not eating foods that would have met those nutritional needs. This finding motivated the USDA to again, rearrange the food groups, simplifying them into the basic four meat, vegetable and fruit bread and cereal and milk. Still, we've got milk is an entirely separate

EAU: And vegetable and fruit is one thing. Okay.

EW: Yeah.

Uh, there were some ambiguous warnings about portion sizes, but it was more just like, be careful not to overdo it kind of a thing. Overall, the focus remained on getting enough. That message would remain consistent until the 1970s when a senate committee found that while many people were still food insecure, leading to the creation of, uh, several food assistance programs in this time, many more were at risk of overnutrition. So, cardiologists in particular had raised the alarm bell, uh, in after World War ii, after they saw a really, really startling striking rise in coronary heart disease, and they attributed that to high calorie diets that increasingly included high amounts of fat, cholesterol, salt, sugar, and alcohol. So this is like in the 1950s, is when. This starts to become

more and more apparent, and you have researchers such as Ansel Keys, who we talked about in our starvation episode. He also did so much work to design the rations for World War ii. did a lot of this nutritional science in the, um, mid 20th century, and so he examined this pattern across the globe and noted certain trends linked to a lower incidence of chronic disease, which included heart disease, but also diabetes and cancer. These trends that he noticed made their way into new dietary recommendations, which for the first time, for the first time in the history of US dietary guidelines advise citizens to eat less of certain foods and more of others. Limit, your salt, sugar, cholesterol, and saturated fats. Stick to non-fat, dairy and vegetable oils. Eat more greens and carbs and less red meat and eggs. With this, the second phase in US, nutritional guidelines had begun: diet as a disease slash eat less food.

EAU: so interesting. This was 1970s.

EW: 1977.

EAU: Okay.

EW: Well, I mean, Keys's guidelines came out earlier, like in the, in 1959 I think, but like this was [00:30:00] slowly building momentum. And by 1977 there were these, this push to investigate why people were so still struggling to, to have sufficient diets, like food insecurity. And then what this, committee actually revealed was this other problem that lurking in the background as where diet was the problem in a different kind of way. Right and so this committee made this, this report, this 1977 report calls dietary goals for the United States. And when it was released, I mean, there was a huge uproar.

EAU: Really,

EW: The cattle industry demanded that the report be withdrawn. The egg industry wanted additional hearings and sugar producers were like, why are we suddenly in the crosshairs?

EAU: What Have we didn't even do anything.

EW: didn't do anything, but the report didn't, just upset those who would be impacted financially. It wasn't widely popular, even among scientists who question, who questioned the science behind these recommendations or said that, you know what, one size fits all guidance that's gonna be of limited use and we don't want this to, to discourage people from seeking individualized diet recommendations from their healthcare provider.

EAU: Something to that effect.

EW: Yeah, yeah. But in this scheme of things, economic objections, far outlied, the scientific ones declining whole milk and egg sales after release of this guidance demonstrated that these guidelines had the power to weaken a few pillars of the American economy.

EAU: Fascinating.

EW: And it was, and it was alarming too, right? Like these, these different pillars of industry were like, uh, excuse me. Like, you're gonna suddenly hurt me. This, these guidelines are bad for the American economy. And so industry was like, I wanna seat at the table. And they got it.

EAU: and they got it.

EW: They got it. And this set a dangerous precedent for accepting, like, being okay with industry's influence in these decisions. At the end of 1977, a revised set of goals was released, and this included three important changes from the initial report, it increased your daily salt allowance from three to five grams a day. Almost

EAU: doubling. Okay.

EW: It also changed. It said that, okay. The added cholesterol from eggs is fine for premenopausal women, young children, and the elderly.

EAU: Okay. specific.

EW: Uhhuh Uhhuh. And it replaced "reduce consumption of meat" with "choose meats, poultry, and fish which will reduce saturated fat intake". Don't you just love these little language changes subtle.

EAU: We're not telling you to do anything different.

EW: Right. Just like choose these, right. Let's not be negative about this. We don't want that negativity up in here. Uh, but these, even still with these revisions, they were controversial and attracted substantial debate. The eat less fat message that dominated the guidelines was called imprecise, both in that it didn't distinguish among different fat types, you know, saturated versus unsaturated, animal versus plant origin. And it singled out one type of food in a way, kind of implying that as long as you cut back on fatty foods, you are fine.

Like, that's totally fine. not about everything else doesn't matter. And this low fat guidance is also where we see, again, how guidelines influence marketing strategies. Like the "vitamin rich" foods of the 1920s, products like Twizzlerss, you know, not

EAU: I

EW: just will, on

EAU: I never forget walking down the aisles in like the nineties and every single cookie was like, low fat cookie, low fat, this, and I'm like, who? It's a cookie. It's still a cookie.

EW: Low fat Twizzlers. I remember being like, I remember thinking, oh, this must be healthy because it's low fat,

EAU: Red vines are non-fat.

EW: non-fat. There you go. I feel I, I, yeah. But fats weren't the only target of criticism. You know, in, in this, you'd be hard pressed to find a recommendation that everyone agreed on. There was like a lot of like, but what about this? And what about that? And language here, and language there. And so in response, there was an explosion in recommendations from other committees and professional organizations whose guidance differed slightly in the particulars. But it all came down to the same basic conclusion. A balanced diet with reduced fat intake. This message had a lasting impact on the diet of Americans from 1965 to 1995. The proportion of calories that an average American got from fat fell from 45% to 34%.

EAU: Wow.

EW: That's quite a 10%. But consumption was not necessarily lower. Right? Increasing portion sizes, particularly at restaurants, meant that fat intake might've fallen [00:35:00] proportionally, or in terms of percentages, but not in terms of absolute

EAU: that's so interesting.

EW: Yeah, so without going into any of the nitty gritty on fat or like saturated versus unsaturated, animal versus plant, this just shows how over generalized guidelines or a focus on one thing can be really misleading. Since the 1977 guidelines, advice has become more specific, but overall, the message has

remained consistent. High fiber, low salt, low sugar, low saturated fat, a variety and diet, exercise, et, echoing the guidelines of the early 20th century, like this is what's been recommended for over a hundred years

EAU: this no major overhauls really.

EW: No major. Yeah. Um, and I'm not gonna go into the specifics of the food pyramid of the nineties versus MyPlate or how wording changed from year to year and stuff like that. Rather, I want to take this last bit of time to peel back the curtain on the process of creating these guidelines and highlighting its weaknesses doing so. With all this controversy in the late 1970s around dietary guidelines, the federal government realized that maybe they should have like a formal process for going about this. Maybe that would be a good idea. Scientists at the USDA and the HHS, along with external experts worked together to produce the 1980 DGA dietary guidelines for Americans, and this ended up being very similar to the 1977 recommendations with a few minor changes, again in wording or recommended amounts.

Since 1980, the guidelines have been revisited every five years in a process that is intended to consider existing and new scientific evidence in light of the current guidelines and make any changes if they're necessary. The way this works is that with every iteration of the DGA an Independent Committee of Subject Matter experts, the DGAC, the committee for committee is appointed. So there's this committee appointed to review the existing guidelines and make recommendations to the USDA and the HHS. The USDA and HHS. Then consider those committee recommendations, and they produce a new set of DGAs guidelines for the general public. Right? So that's, that's, so it goes, DGAC comes up with these recommendations, advises USDA and HHS. Those two departments then decide what advice makes it into the final guidelines. That's it. The final version is totally up to the USDA and the HHS. The DGAC works in an advisory capacity only. Already. Some weak spots emerge. The committee who picks it. It's totally up to the discretion of the secretaries of the USDA and the HHS. The process of appointment has been described as opaque, and there is no explanation as to who is nominated, who is picked, or who is rejected, maybe,

EAU: process of who, how, all

EW: right. How they're picked. Anything like that. Yeah, Maybe someone is on the committee because they are an expert in nutritional science. Maybe it's because they have industry ties. Maybe it's both. The USDA has a dual and sometimes conflicting goal, promote healthy eating and promote American

agriculture. This conflict of interest often manifests in the makeup of this committee. So, for instance, a paper investigating the conflict of interest of the 2020 DGAC, this dietary guidelines committee found that 95% of committee members, 19 of the 20 on the committee had ties to industry. This conflict of interest falls into different categories with most members having multiple, uh, for example, things like being a board member, consultant, employee, receiving research funding, receiving honoraria as a speaker, and so on. Uh, in many cases, these networks of conflicts spiderweb across multiple members with the American Egg Board and General Mills, for example, each listed as a conflict of interest for at least five members. And in fact, most industry actors had multiple ties to the committee. The total number of conflicts of interest varied. So the lowest, of course, had zero. One person, a couple people only had one tie each, whereas the top three had 152, 92, and 84 ties. Yeah. Industry, I've already listed a couple, but industry ranged from Danon to Novo Nordisk, Nestle, National Pork Board, PepsiCo Merck. And many, many, many more.

EAU: This is how I learned that there was a National Pork board was looking into these

EW: Yeah.

EAU: I was like, okay,

EW: Oh, there's so many that kind of thing.

EAU: Yeah,

EW: Is this okay? [00:40:00] No, of course not. It is not okay. I think instinctively no. But is it allowed? Yes.

EAU: Clearly.

EW: It's not supposed to happen, but it does. So for instance, as temporary government employees, members should not participate in a matter where they have a financial interest like that is in the guidelines and they are required to disclose financial interest before final approval. And so then those disclosures, again in this opaque process are reviewed and signed off by the USDA who is supposed to follow the recommendation that many other governmental committees follow, which is that those quote, "who have a conflict of interest should not represent more than a minority of the group" end quote. I don't think that 95% is a minority.

EAU: I don't think by any metric it's a minority.

EW: No, no, uh, no. Uh, further, these disclosures are supposed to be publicly available, but they're often missing with no apparent really hard to find. They're either like, really difficult to find, or just like in this, this one paper, it was like, yeah, we couldn't find the, the, the supposed public release of these disclosures. And I just, I want to acknowledge that having industry ties does not automatically discredit someone's scientific integrity, but the main issue is the lack of transparency surrounding those ties.

EAU: And just the, the, even just the appearance of a conflict of interest Is problematic because then it makes you second guess. It makes the public second guess and it discredits, even if the science is all legitimate, a hundred

EW: Yeah. Right. Uh, but then the science all legitimate. That's a loaded, loaded

EAU: thing to say. Especially

EW: in exactly, and that's all part of this too, right? So, okay. So we've just put the committee together and we're already running into problems

EAU: trust.

EW: So then there's the DGAC report. So this is when they make their recommendations to the USDA and the HHS. What goes into making these recommendations? The committee itself decides the questions to ask, should we eat more eggs or less, for example. And then sifts through heaps of scientific studies on diet and health, sometimes that have been assembled into systematic reviews produced by the USDA itself.

EAU: Hmm.

EW: What gets included into a review, what's considered a good study, how these things are all weighted again. Not transparent, and the process itself is vulnerable to subjectivity, right? If somebody is producing a review on let's say, eggs, what are the studies they're gonna choose from to include in that review? Are they gonna include ones that are funded by the egg board or not? Are they gonna include ones that are, uh, look at correlations, or are they gonna look at ones that are more scientifically robust? You know, what are the things that are included? And if the USDA is assembling these, and again, we have this conflict of interest between American agriculture and American health, how is

that playing a role in just making up these committees and in making up these reviews and in choosing what gets included. A DGAC member from 2010 wrote quote, "despite our evidence-based review lens where we say that food policies are science-based, in reality, we often let our personal biases override the scientific evidence" end quote. And so maybe somebody ranks a paper higher than it should be because it aligns with their industry ties. Or maybe they're skeptical of a study that contradicts consensus science, so they don't read it closely. And, or maybe they're just like, I've always been taught that this is the case so don't think it can be that

EAU: This doesn't make sense to me.

EW: To me. Right. And so, and again, this might be robust, but this is another opportunity. This is another place of weakness. Okay. So the process of appointing a committee is not transparent. The scientific evidence on which the committee bases their recommendations is not as transparent as it might seem. And now we've got the DGA being adapted from the DGAC recommendations. So now we've got the USDA and HHS producing these public facing guidelines, this transformation, total black box.

EAU: Black box and never has it been one-to-one ever. Never, ever,

EW: been one-to-one. So for nearly 20 years, DGAC members have raised concerns that this process weakens or contradicts the scientific consensus that they tried to include in the DGAC report, but without any clear rationale behind the alterations. So you could have a conflict of interest free committee. You could have conflict of interest free papers, and they're choosing all ones, you know, let's say ideal scenario. Right. And still

EAU: Still, you don't know

EW: who, what not represent that. Yes,

EAU: And mean, it's, you can see it even just like if you actually read through the like DGAC scientific reports from previous years, not even getting into the issues [00:45:00] with this year's, but in previous years, like there would be more strong recommendations. Like one drink per adult period. No one should be drinking alcohol. And then what makes it into the actual report? we shouldn't drink, but maybe one or two if you're a male. And that's still what it says, right?

EW: drink.

EAU: Right. We should be reducing sugar to less than 6%. Well, we're gonna keep it at 10%. Why? Right. Like it's, it is, it's, it's never followed one-to-one. And like said, even if those committees were free of bias, even if the science was as robust as we would like it to be, it's still not being translated directly into the dietary guidelines.

EW: yep. Yep. So just imagining this process, if we start with solid scientific evidence, just good robust studies, and then we add in the DGAC committee. And then we add in the DGAC report, and then we add in the DGA. What we end up with is a kind of a murky sludge where industry interests and personal biases have watered down the evidence that we do have.

But does any of this matter? Is anyone actively using these guidelines to make food choices? I struggled a lot with this question while working on this. Like the number of times where I was like, oh, it doesn't even matter at all. Like it doesn't matter. No one, like I, I didn't even know that MyPlate existed

EAU: one did.

EW: This. Yeah, I was oh yeah. The nineties pyramid. could still picture it perfectly in

EAU: The nineties pyramid was discontinued in like the early two thousands and they did this other like dough Deron with stairs thing that no one knew about. And

EW: I remember that

EAU: one

EW: Yeah.

EAU: And then they, and then they got rid of that and they did MyPlate. And literally no one has heard of my plate. There was a survey in 2022 that three quarters of Americans had never heard

EW: of

EAU: plate,

EW: I'm in the majority

EAU: so was my husband.

EW: Yeah. Yeah. But this, this sentiment of like, does it actually matter? This is, echoed and reflected in the conclusion of like every paper that discusses these guidelines. At the end of the day, very few people actively use these guidelines to make food decisions. The continually rising rates of chronic disease in the US would suggest that these guidelines or any minor changes to them are, they're not really having any, uh, significant effect. There are many barriers hindering effective communication of the guidelines. They're either oversimplified, which further weakens the advice that's included, or they're too specific and complicated leading to confusion. For the 40 million people in this country who are at risk of food insecurity, these guidelines are out of reach entirely, even if perfectly communicated. And that's unlikely to change as this administration continues to punish states based on political affiliation and withhold funding for food assistance and other federal assistance programs.

EAU: yes.

EW: Given all of this, it's worth asking whether we should spend time over conflicts of interest on the committee or fact checking claims in the DGA that reject consensus science. But I still think it absolutely is. Lemme tell you why.

EAU: Tell me.

EW: So as I mentioned at the very beginning, these guidelines determine the diets for the tens of millions of Americans who are on certain federal assistance programs. And so the recent deemphasis on plant-based protein and an embrace of saturated fats could certainly have health impacts as one example. But then there's also the matter of education. Most kids in public schools will learn about the food guidelines based on the latest version and carry that with them throughout their lives. Like we just talked about, the nineties food pyramid

EAU: is That's what's in my brain. Percent.

EW: But beyond policy and beyond education, these guidelines and their construction are a powerful example of two things. Number one, the insidious presence of industry in what is supposed to be, and what is claimed to be independent evidence-based health advice. And number two, that these guidelines for a quote unquote "healthy diet" will be manipulated for advertising purposes without repercussions. Like the low fat twizzlers or healthy soda, whole grain cinnamon toast crunch, or zero gram trans fat, Kentucky Fried Chicken. Like there are so many more examples of this. The argument over

corn, corn syrup versus sugar. Oh, like this ketchup has sugar in it, not made with corn syrup. And like, could you tell me the difference

EAU: those

EW: up

EAU: Still ketchup.

EW: Uh, sports drinks versus sodas as though that removing the carbonation from a

EAU: drink

EW: makes it somehow healthy. Yeah, but through this messaging, the food industry wants you to believe that it's looking out for you, that it cares about public health and would never do anything like deliberately target young children with [00:50:00] ads or engineer products that are knowingly, deliberately addictive. Does that sound familiar? Let's replace food industry with big tobacco.

EAU: Yep. Mm-hmm.

EW: Kind Of uncanny, right? When suspicions began to swirl around cigarettes and lung cancer in the 1950s, the cigarette industry had a lot to lose, and they scrambled to reframe the issue "buy our healthier cigarettes. Now with a filter." With a filter like the low fat craze of the 1980s and 1990s, people flocked to buy filtered cigarettes, but no cigarette is safe. Big tobacco was selling a false sense of security, and it turned out to be even more misplaced when it was revealed that the first popular filtered brand had asbestos the filter. Yeah.

EAU: Classic.

EW: Kind of similar to e-cigs today, also selling this false sense of security. And I'm not trying to make like a one, one-to-one comparison between big tobacco and the food industry. You know, for one, the food industry is made up of many players, all with different types of products that fall along the healthy, unhealthy spectrum. And these companies aren't all promoting inherently "bad", quote unquote bad products. Uh, for two, the links between certain food products and chronic diseases are way less mapped out than cigarettes and cancer. But there are startling similarities like the shirking of any corporate responsibility by claiming it's all down to personal choice. The demand for a

seat at the policy table, which has never been denied. The endorsement of certain products by celebrities or hired "doctors", quote unquote doctors, or the funding of studies to support their product.

This is the big tobacco playbook, and as far as I can tell, it's not going anywhere. At the very beginning, I asked who is behind the "should" in what we should eat. When it comes to national dietary guidelines, there are several players involved with competing interests and biases, and I know as you'll discuss more next week, Erin, much of this advice is not just sound, it's based on strong scientific evidence. In other cases, however, industry has had a hand in watering down or reframing guidance, which itself is nothing new. The issue is that it's becoming harder to disentangle where guidance might be manipulated or where doubt has been manufactured. Transparency is promised, yet it's not delivered.

EAU: No,

EW: No. And with this ever present enmeshment of industry interest and governmental policy, it's tempting to resort to nihilism. Like, well, let's just ignore the guidelines and let them do their thing. But instead, I argue that we should be interrogating them. We should be asking who is at the table that produces this "should" and what happens during the translation of science into guidance. Whether we realize it or not, every food decision, what we buy at the store, what we get as a school snack has been shaped not only by personal preference, but also by decades of scientific research competing with industry interests. The next time you go to the store, take a closer look at the labels on your favorite food products. Why does everything have to have protein in it? For the of What makes the cereal heart healthy? Right?

EAU: There's already been so much of this, like health, health washing, the same way that there's this like greenwashing of of things, and I, we'll talk more about it, you know, next week, but it is, it is just going to get worse. Like these guidelines just set us up for more of that, especially without any federal regulation about what should actually be on the labels or like what really constitutes quote unquote "healthy" nutrient dense. Like what do those things actually mean on a label? They don't have any meaning right now.

EW: And the fact that you can advertise to kids is just like, it's so, it's so gross and completely unsurprising. But yeah, these companies sell their products using "healthy" language inspired by nutritional guidelines, but these guidelines are also shaped by these companies, which just worsens the erosion of trust in science. If these guidelines are going to achieve their purported goal of

improving American health through diet, that trust has to be non-negotiable. So that's where I leave you this week.

EAU: I love it, and I can't wait to pick up next week to go deep dive into what these new guidelines are, how they're really different from, like, why are we even talking about them?

EW: I, I, yeah. Why are we talking are we about them? And then what does it all actually mean? Um, and we'll get there, but tell me, Erin, where you got all of your information first. Um, I have a bunch of sources for this. I'm gonna shout out three here that I've [00:55:00] highlighted. One is a, a book that was published I think in the nineties, but is undergone a few different revisions and new introductions by Marion Nestle called Food Politics, how the Food Industry Influences Nutrition and Health. Very famous nutritional scientist. Uh, then there was a four-part series called A Short History of Nutritional Science by Kenneth Carpenter, published in 2003. And then I really enjoyed this paper by Brownell and Warner from 2009 called The Perils of Ignoring History. Big Tobacco Played Dirty and Millions Died. How similar is big food?

EAU: Ooh, that sounds good.

EW: I that one. So, but you can find a list of all of our sources on our website. This podcast will kill you.com. Check it out. Um, and a big thank you to Blood Mobile for providing the music for this episode in all of our episodes, I was like, what are we doing? You're not doing your sources yet.

EAU: to, uh, thank you also to Lianna and Tom and Pete and Mark and everyone at Exactly right. For everything that you do to make this podcast possible.

EW: Yes. Thank you. Uh, and thank you to you. Listeners, tell us the most egregious food label you've seen lately. I'd to hear I love that.

EAU: And thank you also to our patrons for your support over on Patreon. It really does mean the world to us.

EW: It does. Uh, until next time, wash your hands.

EAU: animals. I.